

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0518; Directorate Identifier 2009-SW-021-AD;

Amendment 39-17607; AD 2013-20-01]

RIN 2120-AA64

Airworthiness Directives; Agusta S.p.A. (Type certificate currently held by

AgustaWestland S.p.A) (Agusta) Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for Agusta Model A109A, A109AII, and A109C helicopters with a certain third stage turbine wheel installed. This AD requires installing a placard on the instrument panel and revising the limitations section of the rotorcraft flight manual (RFM). This AD was prompted by several incidents of third stage engine turbine wheel failures, which were caused by excessive vibrations at certain engine speeds during steady-state operations. These actions are intended to alert pilots to avoid certain engine speeds during steady-state operations, prevent failure of the third stage engine turbine, engine power loss, and subsequent loss of control of the helicopter.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain document listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this AD, contact Agusta Westland, Customer Support & Services, Via Per Tornavento 15, 21019 Somma Lombardo (VA) Italy, ATTN: Giovanni Cecchelli; telephone 39- 0331-711133; fax 39 0331 711180; or at http://www.agustawestland.com/technical-bullettins. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the foreign authority's AD, any incorporated-by-reference service information, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations Office, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Chinh Vuong, Aviation Safety

Engineer, Safety Management Group, Rotorcraft Directorate, FAA, 2601 Meacham

Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email chinh.vuong@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

On June 20, 2013, at 78 FR 37162, the Federal Register published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 by adding an AD that would apply to Agusta Model A109A, A109AII, and A109C helicopters with a third stage turbine wheel, part number (P/N) 23065833, installed. The NPRM proposed to require installing a placard on the instrument panel adjacent to the engine and rotor RPM power turbine (N2) indicator and revising the Operating Limitations sections of the Model A109A, A109AII, and A109C RFMs to limit steady-state operations between speeds of 95% and 97%. The proposed requirements were intended to alert pilots to avoid certain engine speeds during steady-state operations, prevent failure of the third stage engine turbine, engine power loss, and subsequent loss of control of the helicopter.

The NPRM was prompted by AD No. 2009-0037-E, dated February 19, 2009, issued by the European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union. EASA issued AD No. 2009-0037-E to correct an unsafe condition for Agusta Model A109A, A109AII, and A109C helicopters with a Rolls Royce Corporation (RRC) engine Model 250-C20B or 250-C20R/1 having a third stage turbine wheel P/N 23065833 installed. EASA advises that following several third stage turbine wheel failures, the engine type certificate holder, RRC, issued Commercial Engine Bulletin (CEB) A-1400 Revision 3, dated January 19, 2009 (CEB A-1400), to introduce an operational limitation on the power turbine (N2) speed range (95% to 97%) for more than 60 seconds in single or cumulative events for engines with the third stage turbine wheel P/N 23065833, installed.

The EASA AD requires amending the RFMs and installing a placard as described in Agusta Bollettino Tecnico No. 109-129, dated February 16, 2009 (BT 109-129). The EASA AD also states to avoid steady-state operation in the 95% to 97% N2 range for more than 60 seconds, and requires the corrective actions of CEB A-1400 if that limitation is exceeded.

Comments

We gave the public the opportunity to participate in developing this AD, but we did not receive any comments on the NPRM (78 FR 37162, June 20, 2013).

FAA's Determination

These helicopters have been approved by the aviation authority of Italy and are approved for operation in the United States. Pursuant to our bilateral agreement with Italy, EASA, its technical representative, has notified us of the unsafe condition described in the EASA AD. We are issuing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs and that air safety and the public interest require adopting the AD requirements as proposed.

Related Service Information

Agusta has issued BT 109-129, which contains procedures for installing a placard on the instrument panel below or near the engine and rotor RPM power turbine (N2) indicator and for inserting the RFM changes into the flight manual.

Costs of Compliance

We estimate that this AD will affect 40 helicopters of U.S. Registry. Based on an average labor rate of \$85 per hour, we estimate that operators will incur the following

costs in order to comply with this AD. Amending the RFM will require about 0.25 workhour, for a cost per helicopter of about \$22 and a cost to U.S. operators of \$880.

Installing the decal will require about 0.2 work-hours, and required parts will cost about \$5, for a cost per helicopter of \$22 and a cost to U.S. operators of \$880. Based on these estimates, the total cost of this AD will be \$44 per helicopter and \$1,760 for the U.S. operator fleet.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII,
Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress
charges the FAA with promoting safe flight of civil aircraft in air commerce by
prescribing regulations for practices, methods, and procedures the Administrator finds
necessary for safety in air commerce. This regulation is within the scope of that authority
because it addresses an unsafe condition that is likely to exist or develop on helicopters
identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866;
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2013-20-01 AGUSTA S.P.A. (TYPE CERTIFICATE CURRENTLY HELD BY AGUSTAWESTLAND S.P.A.) (AGUSTA): Amendment 39-17607; Docket No. FAA-2013-0518; Directorate Identifier 2009-SW-021-AD.

(a) Applicability

This AD applies to Agusta Model A109A, A109AII, and A109C helicopters with a third stage turbine wheel, part number 23065833, installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as a third stage turbine vibration, which could result in turbine failure, engine power loss, and subsequent loss of control of the helicopter.

(c) Effective Date

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(e) Required Actions

Within 30 days:

- (1) For Model A109A helicopters, revise the Power Plant Limitations section, page 1-7, of the Model A109A Rotorcraft Flight Manual (RFM) by inserting page 5 of Agusta Bollettino Tecnico No. 109-129, dated February 16, 2009 (BT 109-129).
- (2) For Model A109AII helicopters, revise the Power Plant Limitations section, page 1-6, of the Model A109AII RFM by inserting page 6 of BT 109-129.

- (3) For Model A109C helicopters, revise the Power Plant and Transmission
 Limitations section, page 1-8, of the Model A109C RFM by inserting page 7 of BT 109129.
- (4) Install a placard on the instrument panel adjacent to the Engine and Rotor RPM Power Turbine (N2) Indicator that states: MIN. CONT. 97% N_2 MIN. TRANS. 95% N_2 .

(f) Alternative Methods of Compliance (AMOCs)

- (1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Chinh Vuong, Aviation Safety Engineer, Safety Management Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email chinh.vuong@faa.gov.
- (2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

(g) Additional Information

(1) The subject of this AD is addressed in European Aviation Safety Agency (EASA) AD No. 2009-0037-E, dated February 19, 2009. You may view the EASA AD on the internet in the AD Docket at http://www.regulations.gov.

(h) Subject

Joint Aircraft Service Component (JASC) Code: 7250: Turbine Section.

(i) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.
 - (i) Agusta Bollettino Tecnico No. 109-129, dated February 16, 2009.
 - (ii) Reserved.
- (3) For Agusta service information identified in this AD, contact Agusta Westland, Customer Support & Services, Via Per Tornavento 15, 21019 Somma Lombardo (VA) Italy, ATTN: Giovanni Cecchelli; telephone 39- 0331-711133; fax 39 0331-711180; or at http://www.agustawestland.com/technical-bullettins.
- (4) You may review this service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.
- (5) You may also view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to:

http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Fort Worth, Texas, on September 20, 2013.

Scott A. Horn,

Acting Directorate Manager, Rotorcraft Directorate, Aircraft Certification Service.

[FR Doc. 2013-24038 Filed 10/30/2013 at 8:45 am; Publication Date: 10/31/2013]